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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,457	09/17/2003	Evan A. Gordon	2662	4334

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A. Burgess Lowe
101 East Maple Street
North Canton, OH 44720

EXAMINER	
TILL, TERRENCE R	

ART UNIT	PAPER NUMBER
1744	

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/664,457	GORDON ET AL.	
	Examiner	Art Unit	
	Terrence R. Till	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 9-20* is/are rejected.

7)☒ Claim(s) *7 and 8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/17/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species: Species A, Figures 1-10; Species B, Figures 11A and 11B; and Species C, Figure 12. The species are independent or distinct because Species A is directed to a plurality of rotary brushes geared together; Species B is directed to a non-rotary brush; and Species C is directed to a single cylindrical rotary brush.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, at least claims 1, 14 and 18 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

2. During a telephone conversation with B. Lowe on 8/7/06 a provisional election was made with traverse to prosecute the invention of Species A, claims 1-20. Affirmation of this election must be made by applicant in replying to this Office action. No claim is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-6, 9, 10, 12, 14 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gergek (US 6,766,556) in view of Howard et al. (US 4,074,385).

The patent to Gergek discloses a cleaning device 10 for cleaning a surface in which cleaning solution is dispensed to the surface and substantially simultaneously extracted along with the dirt on the surface in a continuous operation comprising: a base 12 for movement along a surface; a recovery system 26 mounted to said base and comprising: a suction nozzle 52; a suction source 40 for drawing liquid and dirt from said surface through said suction nozzle; a liquid distribution system 92,94,118,120 for dispensing liquid to said surface; a brush assembly 78,98,100,102,108 operatively connected to said base; and wherein said brush assembly has at least one brush 98 including a first set of pliable elements 78 extending downwardly from said brush and contacting the surface, said brush having at least one opening 94 for dispensing the liquid to the cleaning surface, said opening being located between said first and second sets of pliable elements (see figure 2). Gergek does not disclose a brush assembly having first and second sets of pliable elements having first and second groups of pliable elements of different lengths. The patent to Howard et al. discloses (see figures 1 and 3) a brush assembly having at least one brush including a first set of pliable elements (outermost ring of bristles 16- see figure 3) extending downwardly from said brush sloping downwardly and outwardly and contacting the surface, said first set of pliable elements having at least a first group of pliable elements and a second group of pliable elements. As can be seen from figure 1 of Howard et al., the outermost ring of bristles that slope downwardly and outwardly have all of their ends in the same plane. Therefore, a first

group of pliable elements, i.e., the outermost elements in a bristle tuft (bundle) in the outermost ring of bristles, are longer than a second group of pliable elements of the same bristle tuft that are positioned radially inwardly from the first group. From figure 1, the length of bristles gets progressively shorter from the outermost radial position to an inner radial position. Thus, each of said pliable elements of said second group of said first set extending downwardly from said brush have a length less than said first group of said first set, said second group of pliable elements of said first set being positioned inwardly from said first group of said pliable elements of said first set. Additionally, Howard et al. disclose a second set of pliable elements, i.e., a second bristle tuft (bundle) in a second bristle ring, positioned radially inwardly of the outermost bristle ring (see figure 3) extending downwardly from said brush and contacting the surface, a said second set of pliable elements located inwardly from said first set of pliable elements as defined above, said second set of pliable elements having at least a first group of pliable elements and a second group of pliable elements, each of said pliable elements of said second group of said second set extending downwardly from said brush at a length less than said first group of pliable elements of said second set. As with the outermost ring of the bristles, the length of the second-most outer ring of bristles progressively decreases as the radial distance decreases, as their ends all lie in the same plane (see figure 1). Therefore, It would have been obvious to a person skilled in the art at the time the invention was made to substitute the bristle arrangement of Gergek with the bristle arrangement of Howard et al. in order to promote better cleaning by raising the carpet pile (see Howard et al. column 2, lines 5-10). With respect to claim 5, since the length of the pliable elements (bristles) progressively diminishes from a radial outer position to a radial inner position, Howard is considered to disclose each of said bundles includes said

first and second groups of pliable elements, said second group of pliable elements having at least a first pliable element extending a first length, at least a second pliable element extending a second length greater than the first length of said first pliable element, and at least a third pliable element extending a third length greater than the second length of said second pliable element. With respect to claim 9, although, Gergek, as modified by Howard et al., does not disclose each of said pliable element is angled outwardly in the range of 20 to 40 degrees with respect to an axis perpendicular to the cleaning surface, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the tufts (bundles) of the bristles of Gergek, as modified by Howard et al., to be in the range of 20 to 40 degrees, as it is considered that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

8. Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gergek, as modified by Howard et al., as applied to claim 10 above, and further in view of Malish et al. (US 4,114,225).

9. Gergek, as modified by Howard et al., do not disclose the bristles are crimped. Gergek does not disclose the method of attachment and Howard et al. use staples 26. The patent to Malish et al. discloses (see column 4, lines 30-40) that crimping bristles is old and well known. Therefore because these two methods of attachment were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute a staple attachment method of Howard et al. for a crimp attachment method in view of the teaching of Malish et al.

10. Claims 13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gergek, as modified by Howard et al., as applied to claims 9 and 19 above, and further in view of Krause.

11. Gergek, as modified by Howard et al., do not disclose said brushes being gear brushes and arranged in a gear train. Gergek discloses a belt drive 106 to rotate the brushes. The patent to Krause discloses a plurality of brushes 40 said brushes being geared brushes 44 and arranged in a gear train, each said brush rotating about a vertical axis. Therefore because these two drive methods (belt drive and gear drive) were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the belt drive of Gergek for a gear drive in view of the teaching of Krause.

Allowable Subject Matter

12. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Kintzing, Campbell, Petty and McGee all disclose of brush assemblies having bristles that slope downwardly and outwardly from a base portion.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrence R. Till whose telephone number is (571) 272-1280. The examiner can normally be reached on Mon. through Thurs. and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys P. Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Terrence R. Till
Primary Examiner
Art Unit 1744

trt